

AMENDMENT TO THE CLAIMS:

Please amend the claims as follows:

1. (Original) A polymer comprising an optionally substituted repeat unit of formula (I):



(I)

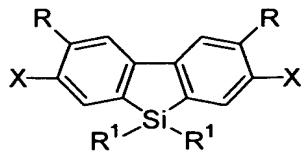
wherein each R is the same or different and represents H or an electron withdrawing group; and each R¹ is the same or different and represents a substituent.

2. (Currently Amended) A polymer according to claim 1 wherein at least one R¹ is a solubilising solubilizing group.

3. (Currently Amended) A polymer according to claim 1 or 2 wherein each R¹ is the same or different and is independently selected from the group consisting of optionally substituted C₁₋₂₀ alkyl, C₁₋₂₀ alkoxy, aryl and heteroaryl groups.

4. (Currently Amended) A polymer according to ~~any preceding~~ claim 1 comprising an optionally substituted aryl or heteroaryl second repeat unit.

5. (Currently Amended) A monomer comprising a repeat unit of formula (II):



(II)

wherein R and R¹ are as defined in any one of claims 1-3 each R is the same or different and represents H or an electron withdrawing group; and each R¹ is the same or different and represents a substituent and each X independently represents a polymerisable polymerizable group.

6. (Currently Amended) A monomer according to claim 5 wherein each X is the same or different and is selected from the group consisting of boronic acid groups, boronic ester groups, borane groups, and halide functional groups.

7. (Currently Amended) A method of forming a polymer comprising the step of polymerising polymerizing a monomer according to claim 5 or 6.

8. (Currently Amended) A method according to claim 7 wherein each X is the same or different and is a halide functional group, and comprising performing the polymerisation polymerization is performed in the presence of a nickel complex catalyst.

9. (Currently Amended) A method according to claim 7 comprising the step of polymerising polymerizing:

(a) a monomer of formula (II) wherein each X is a boron the same or different and is a boron derivative functional group selected from [[a]] the group consisting of boronic acid, [[a]] boronic ester esters, and [[a]] borane boranes, and an aromatic monomer having at least two reactive halide functional groups; or

(b) a monomer of formula (II) wherein each X is the same or different and is a reactive halide functional group, and an aromatic monomer having at least two boron derivative functional group selected from [[a]] the group consisting of boronic acid, [[a]] boronic ester esters, and [[a]] borane boranes; or

(c) a monomer of formula (II) wherein one X is a reactive halide functional group and the other X is a boron derivative functional group selected from [[a]] the group consisting of boronic acid, [[a]] boronic ester esters, and [[a]] borane boranes,

wherein the reaction mixture comprises a catalytic amount of a palladium catalyst suitable for catalysing catalyzing the polymerisation polymerization of the aromatic monomers, and a base in an amount sufficient to convert the boron derivative functional groups into boronate anionic groups.

10. (Currently Amended) An optical device comprising a polymer according to ~~any one of claims 1-4~~ claim 1.

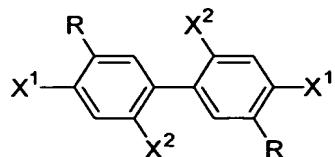
11. (Currently Amended) An optical device according to claim 10 comprising an anode, a cathode and a layer of the polymer according to ~~any one of claims 1-4 located disposed~~ between the anode and the cathode.

12. (Currently Amended) An optical device according to claim 11 ~~that is~~ comprising an electroluminescent device.

13. (Currently Amended) A switching device comprising a polymer according to ~~any one of claims 1-4~~ claim 1.

14. (Currently Amended) A switching device according to claim 13 that is comprising a thin film transistor.

15. (Currently Amended) An optionally substituted compound of formula (IV):

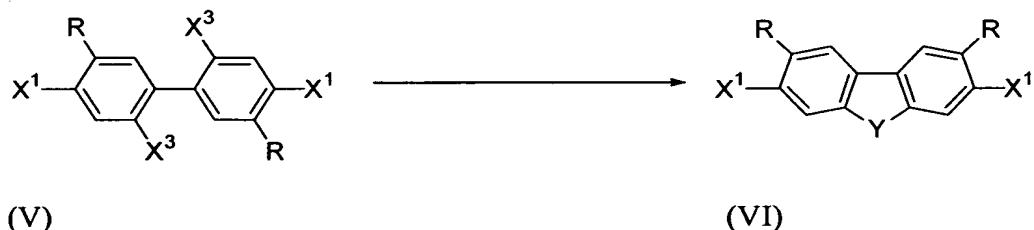


(IV)

wherein R is as defined in any one of claims 1-3 the same or different and represents H or an electron withdrawing group; each X¹ and each X² are the same or different and represent a leaving group capable of participating in a transmetallation reaction and X² has an electronegativity less than that of X¹.

16. (Currently Amended) Preferably, The compound of claim 15, wherein each X¹ and X² is independently a halogen.

17. (Currently Amended) A method of forming a monomer of formula (VI) from a compound of formula (V) according to the following scheme::



wherein the method comprises reacting the compound of formula (V) with a transmetallating agent followed by reaction with a compound of formula LG-Y-LG, wherein X¹ is a leaving group capable of participating in a transmetallation reaction and R are as defined in claim 15 is H or an electron withdrawing group; each X³ is the same or different

and represents a leaving group capable of participating in a transmetallation having an electronegativity less than or the same as that of X¹; Y represents a divalent residue comprising a backbone of 1-3 atoms; and each LG is the same or different and represents a leaving group.

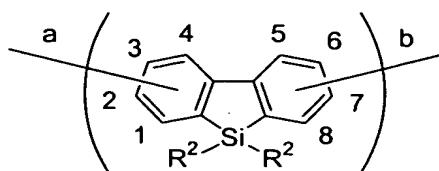
18. (Currently Amended) A method according to claim 17 wherein Y comprises a single atom in its backbone selected from the group consisting of -CR³₂-⁻, -SiR³₂-⁻, -NR³-⁻, -PR³-⁻, -GeR³₂-⁻, -SnR³₂-⁻, O, and S, wherein R³ is selected from the group consisting of optionally substituted alkyl, alkoxy, aryl, and heteroaryl.

19. (Currently Amended) A method according to claim 17 or 18 wherein each X³ is the same or different and has an electronegativity less than that of X¹.

20. (Currently Amended) A method according to any one of claims 17-19 claim 17 wherein each LG is the same or different and is a halogen.

21. (Currently Amended) A method according to any one of claims 17-20 claim 17 wherein the transmetallating agent is a compound of formula R⁴-M wherein R⁴ is alkyl or aryl and M is a metal.

22. (Original) A polymer comprising an optionally substituted first repeat unit of formula (VII):



wherein each R² is the same or different and represents a substituent; the R² groups may be linked to form a ring; and bond (a) is not linked to the 2-position of the repeat unit of formula (VII).

23. (Original) A polymer according to claim 22 wherein bond (b) is not bound to the 7-position of the repeat unit of formula (VII).

24. (Currently Amended) A polymer according to claim 22 ~~or 23~~ wherein bond (a) is bound to the 3-position of the repeat unit of formula (VII).

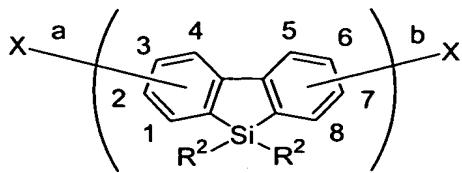
25. (Currently Amended) A polymer according to ~~any one of claims 22-24~~ claim 22 wherein bond (b) is bound to the 6-position of the repeat unit of formula (VII).

26. (Currently Amended) A polymer according to ~~any one of claims 22-25~~ claim 22 wherein at least one R² is a solubilising group.

27. (Currently Amended) A polymer according to ~~any one of claims 22-26~~ claim 22 wherein each R² is the same or different and is selected from the group consisting of optionally substituted C₁₋₂₀ alkyl, C₁₋₂₀ alkoxy, aryl and heteroaryl, ~~preferably a C4-10 alkyl, more preferably n-hexyl or n-octyl~~.

28. (Currently Amended) A polymer according to ~~any one of claims 22-27~~ claim 22 wherein the polymer comprises an optionally substituted aryl or heteroaryl second repeat unit.

29. Currently Amended) An optionally substituted monomer of formula (VIII):



(VIII)

wherein each R^2 is as defined in claim 22, 26, or 27 the same or different and represents a substituent; each X is as defined in claim 5 or 6 independently represents a polymerizable group and at least one X is not linked to the 2-position of the repeat unit of formula (VIII).

30. (Currently Amended) An electroluminescent device comprising an anode, a cathode and an electroluminescent layer located between the anode and cathode wherein the electroluminescent layer comprises a polymeric host material comprising an optionally substituted first repeat unit of formula (IX) and a luminescent dopant



(IX)

wherein R^1 is as defined in any one of claims 1–3 the same or different and represents a substituent.

31. (Original) An electroluminescent device according to claim 30 wherein the repeat unit of formula (IX) is linked through its 3- and 6- positions.

32. (Original) An electroluminescent device according to claim 30 or 31 wherein the polymeric host material comprises a second repeat unit

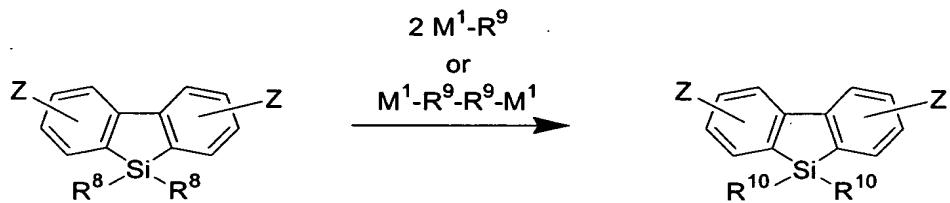
33. (Original) An electroluminescent device according to any one of claims

30-32 claim 30 wherein the second repeat unit comprises a hole transporting material.

34. (Original) An electroluminescent device according to any one of claims

30-33 claim 30 wherein the luminescent dopant is phosphorescent.

35. (Original) A method of forming an optionally substituted compound of formula (X) according to the following process:



(X)

wherein each R^8 is independently selected from the group consisting of C_{1-20} alkyl and aryl; each R^9 is different from R^8 and is independently selected from the group consisting of C_{1-20} alkyl, aryl and heteroaryl; M^1 is a metal; and Z is a reactive group capable of undergoing reaction with M^1-R^9 .

36. (Original) A method according to claim 35 wherein M^1 is lithium.

37. (Currently Amended) A method according to claim 35 wherein R^8 is methyl.

38. (Currently Amended) A method according to claim 35 wherein Z is trialkylsilyl, more preferably trimethylsilyl.

39. (Original) A method according to claim 35 wherein, in the case of reaction with $M^1\text{-}R^9$, the two groups R^{10} are not linked to form a ring.

40. (New) A polymer according to claim 22, wherein R^2 is a C_{4-10} alkyl group.

41. (New) A polymer according to claim 40, wherein R^2 is a m-hexyl group or an n-octyl group.

42. (New) As method according to claim 35, wherein Z is trimethylsilyl.